

=> e 9-nitro-20(s)-camptothecin/cn

E1	1	9-NITRO-2,3,6,10B-TETRAHYDRO-6-METHYL-10B-PHENYL-5H-OXAZOLO(3,2-C)QUINAZOLIN-5-ONE/CN
E2	1	9-NITRO-2-NONANOL/CN
E3	1 -->	9-NITRO-20(S)-CAMPTOTHECIN/CN
E4	1	9-NITRO-3-METHYL-7-PHENYLPYRIMIDO(1,2-A)(1,4)BENZODIAZEPIN-1(5H)-ONE/CN
E5	1	9-NITRO-4,10-DIHYDROTHIENO(3,2-C)(1)BENZOTHIOPIN-10-ONE/CN
E6	1	9-NITRO-4-METHYLPYRIDO(2,3-G)QUINOLINE-5,10-DIONE/CN
E7	1	9-NITRO-5,6,7,8-TETRAHYDROBENZ(F)ISATIN/CN
E8	1	9-NITRO-5,6-DIHYDROBENZO(5,6)CYCLOHEPTA(1,2-C)PYRIDIN-11-ONE/CN
E9	1	9-NITRO-6-(A-THIENYL)PYRIDO(2',3':4,5)PYRIMIDO(1,6-A)BENZIMIDAZOLE/CN
E10	1	9-NITRO-6-DEMETHYL-6-DEOXYTETRACYCLINE/CN
E11	1	9-NITRO-7H-DIBENZO(A,KL)ANTHRACEN-7-ONE/CN
E12	1	9-NITRO-8-HEPTADECANONE/CN

=> s e3

L1 1 "9-NITRO-20(S)-CAMPTOTHECIN"/CN

=> e 9-amino-20(s)-camptothecin/cn

E1	1	9-AMINO-2-PHENYLACRIDINE/CN
E2	1	9-AMINO-20(RS)-CAMPTOTHECIN/CN
E3	1 -->	9-AMINO-20(S)-CAMPTOTHECIN/CN
E4	1	9-AMINO-3,4-DIHYDRO-2H,10H-AZEPINO(3,4-B)INDOLE-1,5-DIONE/CN
E5	1	9-AMINO-3,4-DIHYDROACRIDIN-1(2H)-ONE/CN
E6	1	9-AMINO-3,4-DIMETHOXY-9,10-DIHYDROPHENANTHRENE/CN
E7	1	9-AMINO-3,6-BIS(TRIFLUOROMETHYL)PHENANTHRENE/CN
E8	1	9-AMINO-3,6-DIMETHOXY-9,10-DIHYDROPHENANTHRENE/CN
E9	1	9-AMINO-3-AZIDO-10-METHYLACRIDINIUM CHLORIDE/CN
E10	1	9-AMINO-3-AZIDO-7-ETHOXYACRIDINE/CN
E11	1	9-AMINO-3-AZIDOACRIDINE/CN
E12	1	9-AMINO-3-BROMOCARBAZOLE/CN

=> s e3

L2 1 "9-AMINO-20(S)-CAMPTOTHECIN"/CN

=> e 5-fluorouracil/cn

E1	1	5-FLUOROTRYPTOPHOL/CN
E2	1	5-FLUOROTUBERCIDIN/CN
E3	1 -->	5-FLUOROURACIL/CN
E4	1	5-FLUOROURACIL 2'-DEOXYRIBOSIDE/CN
E5	1	5-FLUOROURACIL ARABINONUCLEOSIDE 5'-PHOSPHATE/CN
E6	1	5-FLUOROURACIL DEOXYRIBONUCLEOSIDE 5'-PHOSPHATE/CN
E7	1	5-FLUOROURACIL DEOXYRIBOSIDE/CN
E8	1	5-FLUOROURACIL ION(1-)/CN
E9	1	5-FLUOROURACIL LITHIUM SALT/CN
E10	1	5-FLUOROURACIL MONOSODIUM SALT/CN
E11	1	5-FLUOROURACIL NITRATE/CN
E12	1	5-FLUOROURACIL PHOSPHORIBOSYLTRANSFERASE/CN

=> s e3

L3 1 5-FLUOROURACIL/CN

=> d 11

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN

RN 91421-42-0 REGISTRY

CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione,  
4-ethyl-4-hydroxy-10-nitro-, (4S)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione,  
4-ethyl-4-hydroxy-10-nitro-, (S)-

OTHER NAMES:

CN **9-Nitro-20(S)-camptothecin**

CN 9-Nitrocampptothecin

CN RFS 2000

CN Rubitecan

FS STEREOSEARCH

MF C20 H15 N3 O6

CI COM

LC STN Files: ADISINSIGHT, ADISNEWS, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CHEMCATS, CIN, CSCHEM, DDFU, DRUGU, EMBASE, IMSDRUGNEWS, IMSPATENTS, IMSRESEARCH, IPA, MRCK\*, PHAR, PROMT, PROUSDDR, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)

DT.CA Caplus document type: Conference; Journal; Patent

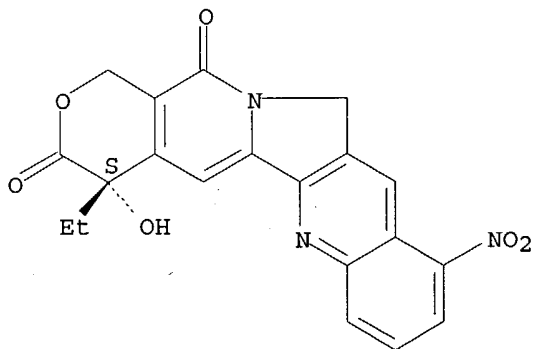
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

199 REFERENCES IN FILE CA (1907 TO DATE)

11 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

199 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 12

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN

RN 91421-43-1 REGISTRY

CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 10-amino-4-ethyl-4-hydroxy-, (4S)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 10-amino-4-ethyl-4-hydroxy-, (S)-

OTHER NAMES:

CN **9-Amino-20(S)-camptothecin**

CN 9-Aminocampptothecin

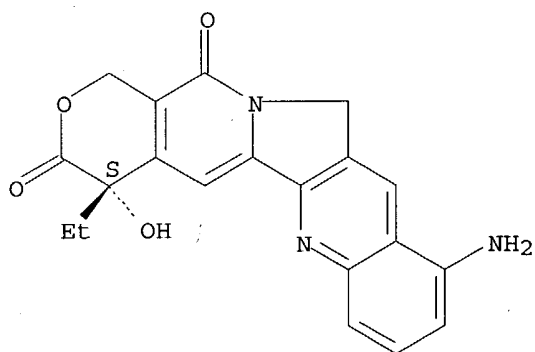
CN NSC 603071

FS STEREOSEARCH

MF C20 H17 N3 O4

CI COM  
 LC STN Files: ADISINSIGHT, ADISNEWS, ANABSTR, BEILSTEIN\*, BIOBUSINESS,  
 BIOSIS, CA, CAPLUS, CASREACT, CEN, CHEMCATS, CIN, CSCHEM, IMSDRUGNEWS,  
 IMSRESEARCH, IPA, MRCK\*, PHAR, PROMT, PROUSDDR, RTECS\*, SYNTHLINE,  
 TOXCENTER, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)  
 DT.CA Caplus document type: Conference; Journal; Patent; Report  
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC  
 (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)  
 RLD.P Roles for non-specific derivatives from patents: BIOL (Biological  
 study); PREP (Preparation); USES (Uses)  
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
 study); FORM (Formation, nonpreparative); PREP (Preparation); PROC  
 (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)  
 RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological  
 study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.



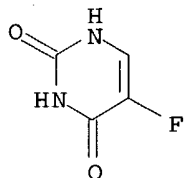
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

260 REFERENCES IN FILE CA (1907 TO DATE)  
 16 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 261 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 13

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 51-21-8 REGISTRY  
 CN 2,4(1H,3H)-Pyrimidinedione, 5-fluoro- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Uracil, 5-fluoro- (8CI)  
 OTHER NAMES:  
 CN 2,4-Dioxo-5-fluoropyrimidine  
 CN 5-Fluoracyl  
 CN 5-Fluoro-2,4(1H,3H)-pyrimidinedione  
 CN 5-Fluoro-2,4-pyrimidinedione  
 CN 5-Fluorouracil  
 CN 5-FU  
 CN Adrucil  
 CN Arumel  
 CN Carac  
 CN Carzonal  
 CN Efudex  
 CN Efudix  
 CN Efurix  
 CN Fluoroblastin

CN Fluoroplex  
 CN Fluorouracil  
 CN Fluracil  
 CN Fluracilum  
 CN Fluri  
 CN Fluril  
 CN Ftoruracil  
 CN FU  
 CN Kecimeton  
 CN NSC 19893  
 CN Phthoruracil  
 CN Phtoruracil  
 CN Queroplex  
 CN Ro 2-9757  
 CN Timazin  
 CN U 8953  
 CN Ulup  
 FS 3D CONCORD  
 DR 1004-03-1, 79108-01-3, 4921-97-5  
 MF C4 H3 F N2 O2  
 CI COM  
 LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*,  
 BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS,  
 CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSChem,  
 CSNB, DDFU, DETHERM\*, DIOGENES, DRUGU, EMBASE, GMELIN\*, HODOC\*, HSDB\*,  
 IFICDB, IFIPAT, IFIUDb, IMSCoSEARCH, IMSDRUGNEWS, IMSPATENTS,  
 IMSRESEARCH, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC, PHAR, PROMT,  
 PROUSDDR, PS, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USAN,  
 USPAT2, USPATFULL, VETU  
 (\*File contains numerically searchable property data)  
 Other Sources: EINECS\*\*, NDSL\*\*, TSCA\*\*, WHO  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 DT.CA Caplus document type: Book; Conference; Dissertation; Journal; Patent;  
 Report  
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
 FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation);  
 PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES  
 (Uses); NORL (No role in record)  
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 study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP  
 (Properties); RACT (Reactant or reagent); USES (Uses)  
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
 study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU  
 (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT  
 (Reactant or reagent); USES (Uses); NORL (No role in record)  
 RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical  
 study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU  
 (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT  
 (Reactant or reagent); USES (Uses)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

13737 REFERENCES IN FILE CA (1907 TO DATE)

369 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
13773 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
39 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus cancerlit  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
19.86	20.07

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 21:09:33 ON 04 NOV 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CANCERLIT' ENTERED AT 21:09:33 ON 04 NOV 2004

=> d his

(FILE 'HOME' ENTERED AT 21:07:30 ON 04 NOV 2004)

FILE 'REGISTRY' ENTERED AT 21:07:58 ON 04 NOV 2004

	E 9-NITRO-20(S)-CAMPTOTHECIN/CN
L1	1 S E3
	E 9-AMINO-20(S)-CAMPTOTHECIN/CN
L2	1 S E3
	E 5-FLUOROURACIL/CN
L3	1 S E3

FILE 'CAPLUS, CANCERLIT' ENTERED AT 21:09:33 ON 04 NOV 2004

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L4 8 L1 AND L2 AND L3

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L5 380 L1 OR L2

=> s l5 and l3  
L6 50 L5 AND L3

=> s l6 and sequential  
L7 3 L6 AND SEQUENTIAL

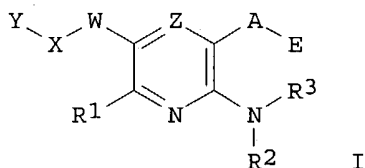
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L8 11 L4 OR L7

=> d l8 fbib abs ti 1-11

L8 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2003:892800 CAPLUS  
DN 139:395950  
TI Preparation of substituted pyrazines as protein kinase modulators  
IN Buhr, Chris A.; Baik, Tae-Gon; Ma, Sunghoon; Tesfai, Zerom; Wang,  
Longcheng; Co, Erick Wang; Epshteyn, Sergey; Kennedy, Abigail R.; Chen,  
Baili; Dubenko, Larisa; Anand, Neel Kumar; Tsang, Tsze H.; Nuss, John M.;  
Peto, Csaba J.; Rice, Kenneth D.; Ibrahim, Mohamed Abdulkader; Schnepp,  
Kevin Luke; Shi, Xian; Leahy, James William; Chen, Jeff; Dalrymple, Lisa  
Esther; Forsyth, Timothy Patrick; Huynh, Tai Phat; Mann, Grace; Mann,  
Lary Wayne; Takeuchi, Craig Stacy  
PA Exelixis, Inc., USA  
SO PCT Int. Appl., 468 pp.  
CODEN: PIXXD2  
DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003093297	A2	20031113	WO 2003-US13869	20030502
	WO 2003093297	A3	20040701		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
OS	MARPAT 139:395950			US 2002-377933P	P 20020503
GI					



AB This invention relates to compds. I [R1 = H, halo, CN, etc.; R2, R3 = H, alkyl, aryl, etc.; R4 = H, alkyl, aryl, etc.; Z = N, CH; A = CO, CS, C(:NR6), R7 (when A = R7, E does not exist); R6 = H, NO2, CN, etc.; R7 = (un)substituted 5-7 membered heterocyclyl; E = NR8R9, NNR2R3, OR4, etc.; R8 = H, alkyl; R9 = H, heteroarylalkyl, etc.; NR8R9 = (un)substituted 5-7 membered heteroalicycyl; W = 6-10 membered arylene, 5-10 membered heteroarylene; X = a bond, (un)substituted alkylene, O(CH2)2-3O, etc.; Y = H, alkyl, aryl, etc.; with provisos] for modulating protein kinase enzymic activity for modulating cellular activities such as proliferation, differentiation, programmed cell death, migration and chemoinvasion, and to pharmaceutical compns. containing such compds. Even more specifically, the invention relates to compds. I that inhibit, regulate and/or modulate kinases, particularly Checkpoint Kinases, even more particularly Checkpoint Kinase 1, or Chk1. Preparation of representative compds. I is described. Thus, amidation of 3-amino-6-phenylpyrazinecarboxylic acid (preparation given) with benzylamine afforded 67% 3-amino-6-phenyl-N-(phenylmethyl)pyrazine-2-carboxamide which showed IC50 of 10,000 nM or greater against Chk1. Table presenting activity data with respect to Chk1 for over 1000 compds. I is given. Methods of therapeutically or prophylactically using the compds. I and compns. to treat kinase-dependent diseases and conditions are also an aspect of the invention, and include methods of treating cancer, as well as other disease states associated with unwanted angiogenesis and/or cellular proliferation, by administering effective amts. of such compds.

TI Preparation of substituted pyrazines as protein kinase modulators

L8 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:737931 CAPLUS

DN 139:255332

TI Method for selecting antitumor drug sensitivity-determining factors and method for predicting antitumor drug sensitivity using the selected factors

IN Aoki, Yuko; Hasegawa, Kiyoshi; Ishii, Nobuya; Mori, Kazushige

PA F. Hoffmann-La Roche A.-G., Switz.

SO PCT Int. Appl., 81 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003076660	A1	20030918	WO 2002-JP2354	20020313
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

AB Based on drug sensitivity data and extensive gene expression data, a model was constructed by multivariate anal. with the partial least squares method type 1. Further, the model was optimized using modeling power and genetic algorithm. Thereby, the degree of contribution of the resp. genes to drug sensitivity was determined to select genes with a high degree of contribution. In addition, the levels of gene expression in specimens were analyzed, and then the drug sensitivity was predicted based on the model. The predicted values agreed well with those drug sensitivity values determined exptl. The drug sensitivity-predicting method provided by the present invention enables assessment of the effectiveness of a drug prior to administration using small quantities of specimens associated with diseases such as cancer. Since this enables the selection of the most suitable drug for each patient, the present invention is very useful in improving a patient's quality of life (QOL).

TI Method for selecting antitumor drug sensitivity-determining factors and method for predicting antitumor drug sensitivity using the selected factors

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:656894 CAPLUS

DN 139:173792

TI Inhibition of lung metastases by aerosol delivery of p53 gene and anti-cancer compounds

IN Knight, Vernon J.; Gilbert, Brian; Koshkina, Nadezhda; Waldrep, J. Clifford; Densmore, Charles L.; Gautam, Ajay

PA Research Development Foundation, USA

SO PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003068936	A2	20030821	WO 2003-US4522	20030214
	WO 2003068936	A3	20040115		
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,			

BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2004028616 A1 20040212 US 2002-356864P P 20020214  
US 2003-366937 20030214  
US 2002-356864P P 20020214

AB The present invention provides a method of inhibiting growth of lung metastases in an individual comprising the steps of administering in a combination an aerosolized polyethylenimine-DNA complex and an aerosolized liposome-anticancer drug complex with both of the complexes delivered via aerosolization. Delivery of both the DNA and the anticancer drug via this method inhibits growth of lung metastases in the individual. Also provided is a method of inhibiting growth of lung metastases in an individual by the administration in combination via aerosolization of a polyethylenimine-p53 complex and a dilauroylphosphatidylcholine-9-nitrocamptothecin complex. The mean survival time of mice challenged with B16-F10 melanoma cells and treated with a **sequential** combination of PEI-p53 plasmid aerosol complex and dilauroylphosphatidylcholine-9-nitrocamptothecin complex was increased by 30-40%, as compared to animals treated with either agent alone. Furthermore, 20% of the mice with the combination therapy survived until day 50 post tumor inoculation and were tumor free.

TI Inhibition of lung metastases by aerosol delivery of p53 gene and anti-cancer compounds

L8 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:656411 CAPLUS

DN 139:159922

TI **Sequential** therapy comprising a 20(S)-camptothecin and a pyrimidine base analog for treating diseases associated with undesirable or uncontrolled cell proliferation

IN Rubinfeld, Joseph; Mettinger, Karl L.; Lyons, John; Romel, Lawrence A.

PA USA

SO U.S. Pat. Appl. Publ., 8 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003158148	A1	20030821	US 2002-81974	20020221
	WO 2003072019	A2	20030904	WO 2003-US3665	20030206
	WO-2003072019	A3	20031218		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2002-81974 A2 20020221

AB A method is provided for treating a patient having a disease associated with undesirable or uncontrolled cell proliferation, the method comprising: administering to the patient a 20(S)-camptothecin for a period of time during which a pyrimidine base analog is not being administered to the patient; and administering a pyrimidine base analog to the patient. Treatment protocols that use **sequential** 9-nitro-20(S)-camptothecin and 5-fluorouracil are given for patients with primary or metastatic carcinoma of the pancreas.

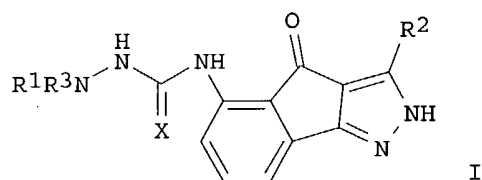
TI **Sequential** therapy comprising a 20(S)-camptothecin and a pyrimidine base analog for treating diseases associated with undesirable or uncontrolled cell proliferation



L8 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2002:449673 CAPLUS  
 DN 137:20389  
 TI Preparation of indenopyrazolone semicarbazides as cyclin dependent kinase inhibitors.  
 IN Carini, David J.  
 PA Bristol-Myers Squibb Company, USA  
 SO PCT Int. Appl., 107 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002046182	A1	20020613	WO 2001-US46904	20011207
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002028849	A5	20020618	US 2000-254116P	P 20001208
			AU 2002-28849	20011207
			US 2000-254116P	P 20001208
US 2002091127	A1	20020711	WO 2001-US46904	W 20011207
			US 2001-10979	20011207
			US 2000-254116P	P 20001208
EP 1351956	A1	20031015	EP 2001-989969	20011207
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
			US 2000-254116P	P 20001208
			WO 2001-US46904	W 20011207

OS MARPAT 137:20389  
 GI



AB Title compds. [I; X = O, S; R1 = (substituted) carbocyclyl, heterocyclyl; R2 = H, (substituted) alkyl, alkenyl alkynyl, carbocyclyl, heterocyclyl; R3 = H, alkyl, cycloalkyl, cycloalkylalkyl; with provisos], were prepared as cdk inhibitors (no data). Thus, 3-(4-piperazinophenyl)-5-[[N-methyl-N-(2-pyridinyl)amino]carbamoylemino]indeno[1,2-c]pyrazol-4-1 was prepared in several steps starting from 4-piperazinoacetophenone.

TI Preparation of indenopyrazolone semicarbazides as cyclin dependent kinase inhibitors.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2002:275788 CAPLUS  
 DN 136:304046  
 TI Antitumor therapy comprising distamycin derivatives

IN Fowst, Camilla; Vreeland, Franzanne; Geroni, Maria Cristina Rosa  
 PA Pharmacia & Upjohn S.P.A., Italy; Pharmacia & Upjohn Company  
 SO PCT Int. Appl., 13 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002028389	A1	20020411	WO 2001-EP10988	20010921
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 6576612	B1	20030610	US 2000-676770	A 20001002
AU 2002021622	A5	20020415	US 2000-676770	20001002
			AU 2002-21622	20010921
			US 2000-676770	A 20001002
EE 200300129	A	20030616	WO 2001-EP10988	W 20010921
			EE 2003-129	20010921
			US 2000-676770	A 20001002
EP 1345604	A1	20030924	WO 2001-EP10988	W 20010921
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			EP 2001-986259	20010921
			US 2000-676770	A 20001002
BR 2001014389	A	20040203	WO 2001-EP10988	W 20010921
			BR 2001-14389	20010921
			US 2000-676770	A 20001002
JP 2004510734	T2	20040408	WO 2001-EP10988	W 20010921
			JP 2002-532214	20010921
			US 2000-676770	A 20001002
NO 2003001410	A	20030327	WO 2001-EP10988	W 20010921
			NO 2003-1410	20030327
			US 2000-676770	A 20001002
US 2004006023	A1	20040108	WO 2001-EP10988	W 20010921
			US 2003-381272	20030624
			WO 2001-EP10988	W 20010921

OS MARPAT 136:304046

AB The present invention relates to an administration schedule comprising the i.v. administration of a  $\alpha$ -halogen-acryloyl distamycin derivative, or a pharmaceutically acceptable salt thereof. The above administration allows the treatment of a variety of tumors in mammals. N-[5-[[[5-[[[5-[[[2-[[amino(imino)methyl]amino]ethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-4-[(2-bromoacryloyl)amino]-1-methyl-1H-pyrrole-2-carboxamide hydrochloride was administered by i.v. infusion to patients with solid tumors.

TI Antitumor therapy comprising distamycin derivatives

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:798040 CAPLUS

DN 135:339222

TI Inhibition of abnormal cell proliferation with camptothecin or a derivative, analog, metabolite, or prodrug thereof, and combinations including camptothecin

IN Rubinfeld, Joseph

PA Supergen, Inc., USA  
SO PCT Int. Appl., 38 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001080843	A2	20011101	WO 2001-US12848	20010419
	WO 2001080843	A3	20020815		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	US 6420378	B1	20020716	US 2000-553710	A1 20000420
				US 2000-553710	20000420
				US 1999-418862	A2 19991015
	EP 1276479	A2	20030122	EP 2001-930607	20010419
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
				US 2000-553710	A 20000420
				WO 2001-US12848	W 20010419

PATENT FAMILY INFORMATION:

FAN 2001:131197

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6191119	B1	20010220	US 1999-418862	19991015
	US 6420378	B1	20020716	US 2000-553710	20000420
				US 1999-418862	A2 19991015
	WO 2001028542	A2	20010426	WO 2000-US25105	20000913
	WO 2001028542	A3	20020110		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
				US 1999-418862	A1 19991015
	EP 1223934	A2	20020724	EP 2000-961879	20000913
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
				US 1999-418862	A 19991015
				WO 2000-US25105	W 20000913
	US 6664233	B1	20031216	US 2000-709967	20001110
				US 1999-418862	A1 19991015
	US 2002086818	A1	20020704	US 2002-74575	20020211
				US 1999-418862	A1 19991015
				US 2000-709967	A1 20001110
	US 2002111362	A1	20020815	US 2002-127956	20020422
				US 1999-418862	A2 19991015
				US 2000-553710	A1 20000420

FAN 2002:534034

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6420378	B1	20020716	US 2000-553710	20000420
				US 1999-418862	A2 19991015

US 6191119 B1 20010220 US 1999-418862 19991015  
 WO 2001080843 A2 20011101 WO 2001-US12848 20010419  
 WO 2001080843 A3 20020815

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,  
 HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,  
 LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,  
 RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,  
 VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1276479 A2 20030122 EP 2001-930607 A1 20000420  
 20010419

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

US 2000-553710 A 20000420  
 WO 2001-US12848 W 20010419  
 US 2002-127956 20020422  
 US 1999-418862 A2 19991015  
 US 2000-553710 A1 20000420

US 2002111362 A1 20020815

AB A method for treating diseases associated with abnormal cell proliferation comprises delivering to a patient in need of treatment a compound selected from 20(S)-camptothecin, an analog of 20(S)-camptothecin, a derivative of 20(S)-camptothecin, a prodrug of 20(S)-camptothecin, and pharmaceutically active metabolite of 20(S)-camptothecin, in combination with an effective amount of one or more agents selected from the group consisting of alkylating agent, antibiotic agent, antimetabolic agent, hormonal agent, plant-derived agent, anti-angiogenesis agent and biol. agent. The method can be used to treat benign tumors, malignant or metastatic tumors, leukemia and diseases associated with abnormal angiogenesis.

TI Inhibition of abnormal cell proliferation with camptothecin or a derivative, analog, metabolite, or prodrug thereof, and combinations including camptothecin

L8 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:70491 CAPLUS

DN 135:86663

TI In vitro antitumor activity of 9-nitrocampptothecin as a single agent and in combination with other antitumor drugs

AU Bernacki, Ralph J.; Pera, Paula; Gambacorta, Peter; Brun, Yseult; Greco, William R.

CS Department of Pharmacology and Therapeutics, Roswell Park Cancer Institute, Buffalo, NY, 14263, USA

SO Annals of the New York Academy of Sciences (2000), 922(Camptothecins), 293-297

CODEN: ANYAA9; ISSN: 0077-8923

PB New York Academy of Sciences

DT Journal

LA English

AB Preclin. studies at Roswell Park Cancer Institute by Minderman, Cao, and Rustum (unpublished results) showed that a combination of SN-38 and 5-FU against HCT-8 human colon carcinoma cells in vitro was synergistic, with the best interaction occurring when the drugs were added sequentially, SN-38 first. Their in vivo studies using HCT-8 tumor xenografts implanted s.c. in nude athymic mice demonstrated superior efficacy for a **sequential** i.v. administration of CPT-11, 24 h before 5-FU. On the basis of these studies, our group has begun to evaluate effects of RFS2000 (9-nitro-20(S)-camptothecin) (9-NC) in combination with a series of other antitumor agents. Using a panel of human tumor cell lines including A121 ovarian cancer, HCT-8 colon cancer, H-460 NSCLC, HT-1080 fibrosarcoma, and MCF7 mammary cancer, we found that a 2-h exposure to 9-NC resulted in ID50 values of <1.0  $\mu$ M, whereas continuous exposure to drug resulted in ID50 values of <1.0 nM. Tumor growth inhibitory

activities of 5-FU, gemcitabine, and paclitaxel were determined for comparison. Combinations of these agents were evaluated with 9-NC using the human HCT-8 colon tumor cell line. Concurrent and **sequential** combinations of 9-NC with 5-FU had some regions of the concentration-effect surface with local synergy and some with local antagonism. However, **sequential** combination of 9NC or SN-38 followed by 5-FU, 24 h later appeared to be highly synergistic at high dose-effect levels (i.e., ID90), suggesting that **sequential** drug administration may be more efficacious at high effect level and that the order of drug addition is very important. Overall, our results were similar to that found earlier by Rustum's group with CPT11 (or SN-38) and 5-FU, suggesting that **sequential** combination of 9-NC (or other camptothecin analogs) followed by 5-FU has potential for the treatment of cancer in man.

TI In vitro antitumor activity of 9-nitrocarnptothecin as a single agent and in combination with other antitumor drugs

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:260065 CAPLUS

DN 132:288757

TI Selective eradication of virally infected cells by combined use of a cytotoxic agent and an antiviral agent

IN Korant, Bruce D.

PA Du Pont Pharmaceuticals Company, USA

SO PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000021565	A1	20000420	WO 1999-US23192	19991005
W: AL, AU, BR, CA, CN, CZ, EE, HU, IL, IN, JP, KR, LT, LV, MK, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, VN, ZA				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9965088	A1	20000501	US 1998-103922P	P 19981013
			AU 1999-65088	19991005
			US 1998-103922P	P 19981013
			WO 1999-US23192	W 19991005
US 6649644	B1	20031118	US 1999-416431	19991012
			US 1998-103922P	P 19981013

AB A method for treating human immunodeficiency virus (HIV) infection in a mammal comprises administering to the mammal a therapeutically effective amount of a combination of: (i) at least one cytotoxic agent and (ii) at least one nonnucleoside reverse transcriptase HIV inhibitor. Also provided is a method of treating chronic viral infections comprising administering to the mammal a therapeutically effective amount of a combination of: (i) at least one cytotoxic agent and (ii) at least one antiviral agent.

TI Selective eradication of virally infected cells by combined use of a cytotoxic agent and an antiviral agent

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:404823 CAPLUS

DN 131:49486

TI Local delivery of therapeutic agents

IN Wrenn, Simeon M., Jr.

PA Supergen, Inc., USA

SO PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9930684	A1	19990624	WO 1998-US24151	19981112
	W: AU, CA, CN, HU, IL, JP				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2309080	AA	19990624	US 1997-989281	A 19971212
				CA 1998-2309080	19981112
				US 1997-989281	A 19971212
				WO 1998-US24151	W 19981112
	AU 9914031	A1	19990705	AU 1999-14031	19981112
				US 1997-989281	A 19971212
				WO 1998-US24151	W 19981112
	EP 1037605	A1	20000927	EP 1998-957882	19981112
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI			US 1997-989281	A 19971212
				WO 1998-US24151	W 19981112

AB Disclosed are implants, stents, catheters, methods and kits for the local delivery of therapeutic agents that are preferentially cytotoxic or cytostatic with regards to proliferating cells to sites where proliferative cells are present. A dispersion of 9-nitro-20(S) camptothecin was mixed with a 1% poly(L-lactic acid) solution in chloroform. This solution was then used to coat Wiktor-type stents. The coated stents were delivered in an artery at or near a tumor site, and deployed to supply 9-nitro-20(S) camptothecin to the tumor site in a localized fashion.

TI Local delivery of therapeutic agents

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:224735 CAPLUS

DN 130:271994

TI Small particle liposome aerosols for delivery of anticancer drugs

IN Knight, J. Vernon; Gilbert, Brian; Waldrep, J. Clifford; Koshkina, Nadezhda; Wellen, C. W.; Giovanella, Beppino

PA Research Development Foundation, USA

SO PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9915153	A1	19990401	WO 1998-US19851	19980923
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
				US 1997-933254	A 19970923
	US 6090407	A	20000718	US 1997-933254	19970923
	CA 2303147	AA	19990401	CA 1998-2303147	19980923
				US 1997-933254	A 19970923
				WO 1998-US19851	W 19980923
	AU 9895031	A1	19990412	AU 1998-95031	19980923
	AU 750426	B2	20020718		
				US 1997-933254	A 19970923

EP 1011638 A1 20000628 WO 1998-US19851 W 19980923  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, FI EP 1998-948463 19980923

NZ 503129	A	20010831	US 1997-933254	A	19970923
			WO 1998-US19851	W	19980923
			NZ 1998-503129		19980923
			US 1997-933254	A	19970923
			WO 1998-US19851	W	19980923
JP 2001517614	T2	20011009	JP 2000-512524		19980923
			US 1997-933254	A	19970923
			WO 1998-US19851	W	19980923
CN 1093399	B	20021030	CN 1998-809371		19980923
			US 1997-933254	A	19970923
RU 2223749	C2	20040220	RU 2000-110113		19980923
			US 1997-933254	A	19970923
			WO 1998-US19851	W	19980923
US 6346233	B1	20020212	US 2000-617623		20000717
			US 1997-933254	A3	19970923
ZA 2001005505	A	20030502	ZA 2001-5505		20010704
			US 1997-933254	A	19970923
US 2002102296	A1	20020801	US 2001-969374		20011001
			US 1997-933254	A3	19970923
			US 1999-353496	B1	19990715
US 2004208935	A1	20041021	US 2004-842977		20040511
			US 1997-933254	A3	19970923
			US 1999-353496	B1	19990715
			US 2001-969374	A1	20011001

AB The small particle liposome aerosol compds. and methods of treatment of the present invention involve lipid- or water soluble anticancer drugs incorporated into liposomes. The liposomes are administered in aqueous dispersions from a jet nebulizer to the respiratory tract of an individual. Various anticancer drugs may be used, including 20-S-camptothecin (CT), 9-nitrocamptothecin (9-NC), 9-aminocamptothecin, 10,11-methylenedioxycamptothecin and taxol or its derivs. Administration of these drugs by inhalation provides faster and more efficient absorption of the anticancer drug than does i.m. administration or oral administration. For formulation of liposomes, 9-NC (100 mg/mL) or CPT (10 mg/mL) was dissolved in 100% DMSO, and added to DLPC dissolved in tertiary butanol (40°) so the final DMSO concentration did not exceed 5% of the total volume and the ratio of drug to lipid was 1:50. The final suspension was clear. If precipitation occurred, it was reheated to 50-60°. The preparation was frozen in liquid nitrogen and lyophilized overnight. For use the material was dissolved in sterile water to the appropriate drug concentration, not exceeding 1.0 mg/mL for either drug. The efficiency of incorporation of the drug in the liposomes was examined qual. by microscopic examination under polarized light. Unincorporated drug was seen as bi refringent crystals. The efficiency of incorporation was examined by centrifugation of aqueous suspensions of liposomes on Percoll gradients. One-tenth mL of suspension was layered over 2 mL of 5 gradient and centrifuged at 2000 rpm for 25-30 min. The liposome layered at the water-Percoll interface, while unincorporated drug was deposited at the bottom of the tube.

TI Small particle liposome aerosols for delivery of anticancer drugs  
 RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT